

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau(43) International Publication Date
7 October 2004 (07.10.2004)

PCT

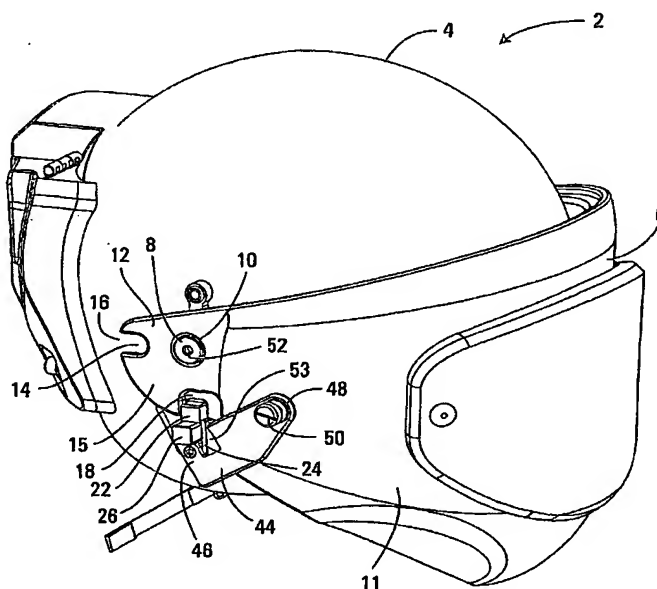
(10) International Publication Number
WO 2004/084664 A2

- (51) International Patent Classification⁷: **A42B**
- (21) International Application Number:
PCT/CA2004/000444
- (22) International Filing Date: 29 March 2004 (29.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/457,927 28 March 2003 (28.03.2003) US
60/520,641 18 November 2003 (18.11.2003) US
- (71) Applicant (for all designated States except US):
MED-ENG SYSTEMS INC. [CA/CA]; 2400 St. Laurent
Boulevard, Ottawa, Ontario K1G 6C4 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **MAKRIS, Aristidis**
[CA/CA]; 8 Gleeson Way, Ottawa, Ontario K2J 5A2
(CA). **GRILLAS, Athanasios** [CA/CA]; 13 Gleeson
Way, Ottawa, Ontario K2J 5A2 (CA). **MITRIC, Bratislav**
[CA/CA]; 604-199 Kent St., Ottawa, Ontario K2P 2K8

(CA). **FISHER, Geoffrey** [CA/CA]; 909-321 Waver-
ley St., Ottawa, Ontario K2P 0W2 (CA). **SOBEL, Jay**
[CA/CA]; 46 Summerwind Cres., Ottawa, Ontario K2G
6G5 (CA). **WHITE, Julia** [CA/CA]; 200 Blackdome
Cres., Kanata, Ontario K2T 1A6 (CA). **MYLES, Justin,**
E. [CA/CA]; 6100 8th Line, Carlsbad Springs, Ontario
K0A 1K0 (CA). **VADEBONCOEUR, Maxime** [CA/CA];
163 rue Dollard-des Ormeaux, Gatineau, Quebec J8X 3M8
(CA). **JAMES, Raymond** [CA/CA]; 2123 Blackcreek
Rd., Edwards, Ontario K0A 1V0 (CA). **L'ABBE, Richard**
[CA/CA]; 3203 Carriage Hill Place, Ottawa, ONTARIO
K1T 3X2 (CA). **FARRELL, Rod** [CA/CA]; 42 Tennyson
St., Ottawa, Ontario K2E 7H1 (CA). **KALAAM, Shaik**
[CA/CA]; 803-2851 Baycrest Dr., Ottawa, Ontario K1V
8V7 (CA). **HEDGE, Clint** [CA/CA]; 13665 Locks Rd.,
RR 3, Chesterville, Ontario K0C 1H0 (CA). **BORTOT,**
Peter [CA/CA]; 5427 Taylor Way, Osgood, Ontario K0A
2W0 (CA). **PFLANZ, Simon** [CA/CA]; 10146 Clark
Rd., Mountain, Ontario K0E 1S0 (CA). **LECLERC,**
Gilles [CA/CA]; 4 Leber, Aylmer, Quebec J9H 1C5 (CA).
PAGE, Daniel [CA/CA]; 1409 - 158B MacArthur, Ottawa,
Ontario K1L 8C9 (CA).

[Continued on next page]

(54) Title: HEAD PROTECTOR



(57) Abstract: A head protection system comprises a helmet shell, a visor mounting for pivotally mounting a visor to the shell to enable the visor to be moved between raised and lowered positions, and a retainer for releasably retaining the visor to the helmet. The system includes a visor adapted for mounting on the shell which comprises a substrate of transparent thermoplastic material and a backing substrate comprising a plurality of layers of high performance, ballistic resistant material. The system may further include a second visor which can be releasably connected to the shell using the same visor mounting and which may have a different construction and primary function.



(74) Agents: STONE, Olivier, A. et al.; Smart & Biggar, P.O. Box 2999, Station D, 900 - 55 Metcalfe Street, Ottawa, Ontario K1P 5Y6 (CA).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.